Textbook Alignment to the Utah Core – 3rd Grade Mathematics

This alignment has been completed using an "Independent Alignment Vendor" from the USOE approved list (www.schools.utah.gov/curr/imc/indvendor.html.) Yes _✓_ No _____

Name of Company and Individual Conducting Alignment: Standard Media Services, LLC: David A. Johnson

A "Credential Sheet" has been completed on the above company/evaluator and is (Please check one of the following):

☐ **On record with the USOE.**

✓ **The "Credential Sheet" is attached to this alignment.**

Instructional Materials Evaluation Criteria (name and grade of the core document used to align): Grade 3 Mathematics

Title: *Math Connects* ©2009 Grade 3 **ISBN#: 978-0-02-105732-0**

Publisher: Macmillan/McGraw-Hill

Overall percentage of coverage in the *Student Edition (SE) and Teacher Edition (TE)* of the Utah State Core Curriculum: 99 %

Overall percentage of coverage in *ancillary materials* of the Utah Core Curriculum: _____%

STANDARD I: Students will understand the base-ten numeration system, place value concepts, simple fractions and perform operations with whole numbers.

Percentage of coverage in the *student and teacher edition* for Standard I: 100 %	**Percentage of coverage not in student or teacher edition, but covered in the *ancillary material* for Standard I: _____%**		
	Coverage in *Student Edition(SE) and*	Coverage in *Ancillary*	*Not covered*

OBJECTIVES & INDICATORS		*Teacher Edition (TE)* (pg #'s, etc.)	*Material* (titles, pg #'s, etc.)	*in TE, SE or ancillaries* ✓
Objective 1.1: Represent whole numbers up to 10,000, comprehend place value concepts, and identify relationships among whole numbers using base-ten models and symbolic notation.				
a.	Read, write, and represent whole numbers using standard and expanded form.	SE/TE: 4, 24-27, 28-30, 31, 37, 58, R2, R3		
b.	Demonstrate multiple ways to represent numbers using models and symbolic representations (e.g., fifty is the same as two groups of 25, the number of pennies in five dimes, or 75 - 25).	SE/TE: 4, 6, 7, 22-23, 24-27, 28-29, 32, 52-55, 62, 69-71, 74-77, 78-79, 81, 82-83, 90-91, 234-235, 244,		
c.	Identify the place and the value of a given digit in a four-digit numeral and round numbers to the nearest ten, hundred, and thousand.	SE/TE: 23, 24-27, 28-30, 31, 35, 37, 38-39, 44-46, 47, 48-51, 55, 58, 61, 62, 63, 64-65, 74-76, 101, 102, 114-116, 124, 145, 640-642, 662, 664, R3, R4		
d.	Order and compare whole numbers on a number line and use the symbols <, >, ≠, and = when comparing whole numbers.	SE/TE: 34-35, 38, 44-45, 48-49, 60		
e.	Identify factors and multiples of whole numbers.	SE/TE: 159-160, 200, 201-202, 203-205, 206-208, 211, 212, 214-216, 217, 218-221, 222-224, 230-233, 234-237, 239, 240, 241, 242, 243, 245, 258-260, 635-637		
Objective 1.2: Use fractions to describe and compare parts of the whole.				
a.	Identify the denominator of a fraction as the number of equal parts of the unit whole and the numerator of a fraction as the number of equal parts being considered.	SE/TE: 556, 560-562, 564-565, 585, 590-591, 594, R35, R36		
b.	Define regions and sets of objects as a whole and divide the whole into equal parts using a variety of objects, models, and illustrations.	SE/TE: 556, 559-560, 561-563, 564-567, 590-591, R35, R36, R37, R67		

c.	Name and write a fraction to represent a portion of a unit whole for halves, thirds, fourths, sixths, and eighths.	SE/TE: 556-567, 560, 561-562, 564-567, 578, 581, 590-591, 592, R35		
d.	Place fractions on the number line and compare and order fractions using models, pictures, the number line, and symbols.	SE/TE: 560, 580-582, 584-587, 590, 593, 594, 595, 597, 606, R36, R37		
e.	Find equivalent fractions using concrete and pictorial representations.	SE/TE: 570-571, 572-574, 575, 577, 578, 590, 592, R36, R67		
Objective 1.3: Model problems involving addition, subtraction, multiplication, and division.				
a.	Demonstrate the meaning of multiplication and division of whole numbers through the use of a variety of representations (e.g., equal-sized groups, arrays, area models, and equal jumps on a number line for multiplication, partitioning and sharing for division).	SE/TE: 154, 156, 157-158, 159-161, 162-164, 165-166, 167, 168-170, 174-176, 178-179, 181, 184, 186, 191, 193, 195, 200, 201-202, 203-204, 205, 206-208, 214-215, 218-219, 222-222, 228, 230-232, 239, 243, 248, 251-252, 253-255, 256-257, 258-261, 285, 295-297, 298, 301, 306, 313, 316-317, 322, 323, 326, 328, 640-641, 644-645, 650-653		
b.	Use a variety of strategies and tools, such as repeated addition or subtraction, equal jumps on the number line, and counters arranged in arrays to model multiplication and division problems.	SE/TE: 154, 157-164, 168-170, 174-176, 186, 191-194, 202-205, 206-208, 214-216, 218-221, 222-223, , 230-232, 234-235, 239, 248, 251-261, 264-265, 270, 278, 284-288, 295-296, 297-299, 300-302, 304, 306-308, 313, 316-317, 322-323, 326, 640-641, 644-645, 650-653, LA2		
c.	Demonstrate, using objects, that multiplication and division by the same number are inverse operations (e.g., 3 x □ = 12 is the same as 12 ÷ 3 = □ and □ = 4).	SE/TE: 256-257, 258-261, 262, 271, 278, 284-285, 298, 301, 303, 306-307, 309, 312-314, 317, 323, 325		
d.	Demonstrate the effect of place value when multiplying whole numbers by 10.	SE/TE: 178-181, 193, 635-637, 662-663		
e.	Write a story problem that relates to a given addition, subtraction, or multiplication equation, and write a number sentence to solve a problem related to the students'	SE/TE: 70, 73, 205, 314, 316, 319, 333, 335, 340, 363		

	environment.			
Objective 1.4: Compute and solve problems involving addition and subtraction of 3- and 4- digit numbers and basic facts of multiplication and division.				
a.	Use a variety of methods to facilitate computation (e.g., estimation, mental math strategies, paper and pencil).	SE/TE: 72-73, 76, 77, 92, 97, 100, 101, 102, 114-117, 119, 124, 145-146, 373-377, 379-380, 384-385, 387-388, 412-413, 423, 426-427, 433-434, 439-440, 445-446, 640-642, 645-647, 653, 656-657, 662, 664, 666, LA6-LA9		
b.	Find the sum or difference of numbers, including monetary amounts, using models and strategies such as expanded form, compensation, partial sums, and the standard algorithm.	SE/TE: 52-55, 58, 62, 66-71, 78-104, 111, 113, 108-151, 237, 333-334, 341, 357, 644, 650		
c.	Compute basic multiplication facts (0-10) and related division facts using a variety of strategies based on properties of addition and multiplication (i.e., commutative, associative, identity, zero, and the distributive properties).	SE/TE: 157-158, 160-161, 162-164, 168, 170, 174-176, 177, 178-181, 186-188, 191, 192, 193, 194, 201, 203-205, 206-208, 214-216, 218-221, 222-224, 234-237, 238, 239, 242, 244, 258- 261, 266, 505, 635, 637, 663, LA2-LA5		
STANDARD II: Students will use patterns, symbols, operations, and properties of addition and multiplication to represent and describe simple number relationships.				
Percentage of coverage in the *student and teacher edition* for Standard II: 100 %		**Percentage of coverage not in student or teacher edition, but covered in the *ancillary material* for Standard II: _____%**		
OBJECTIVES & INDICATORS		**Coverage in *Student Edition(SE) and Teacher Edition (TE)* (pg #'s, etc.)**	**Coverage in *Ancillary Material* (titles, pg #'s, etc.)**	***Not covered in TE, SE or ancillaries*** ✓
Objective 2.1: Create, represent, and analyze growing patterns.				

a.	Create and extend growing patterns using objects, numbers, and tables.	SE/TE: 7, 16, 17-19, 21, 27, 31, 33, 55, 56, 57, 63, 156, 193, 200, 201-203, 204, 212-213, 229, 277, 305, 330, 348-351, 362, 365-366, 383, 428, 471, 478-481, 503, R30		
b.	Describe how patterns are extended using manipulatives, pictures, and numerical representations.	SE/TE: 16-17-19, 32, 33, 57, 156, 200, 212-213, 229, 277, 305, 330, 383, 428, 471, 478-481, 503, R30		
Objective 2.2: Recognize, represent, and simplify simple number relationships using symbols, operations, and properties.				
a.	Represent numerical relationships as expressions, equations, and inequalities.	SE/TE: 69-71, 81, 101, 105, 159-161, 332, 333-335, 336-337, 338-341, 344-347, 348-351, 353, 356-359, 362, 363, 364, 365, 366, 367, R11		
b.	Solve equations involving equivalent expressions (e.g., 6 + 4 = Δ + 7).	SE/TE: 348-349, 356-359, 362, 365, 366, R16, R17, R21		
c.	Use the >, <, and = symbols to compare two expressions involving addition and subtraction (e.g., 4 + 6 □ 3 + 2; 3 + 5 □ 16 - 9).	SE/TE: 34-37, 332, 333-335, 338-341, 362-363		
d.	Recognize and use the commutative, associative, distributive, and identity properties of addition and multiplication, and the zero property of multiplication.	SE/TE: 69-71, 79, 100-101, 160-161, 186-188, 191, 201, 214, 218-219, 221, 234-237, 238, 244, LA2-LA5		
STANDARD III: Students will describe and analyze attributes of two-dimensional shapes.				
Percentage of coverage in the *student and teacher edition* for Standard III: 100 %		**Percentage of coverage not in student or teacher edition, but covered in the *ancillary material* for Standard III: _____%**		
OBJECTIVES & INDICATORS		**Coverage in *Student Edition(SE) and Teacher Edition (TE)* (pg #'s, etc.)**	**Coverage in *Ancillary Material* (titles, pg #'s, etc.)**	***Not covered in TE, SE or ancillaries*** ✓
Objective 3.1: Describe and compare attributes of two-				

dimensional shapes.				
a.	Identify, describe, and classify polygons (e.g., pentagons, hexagons, octagons).	SE/TE: 11, 472-475, 481, 483, 484-485, 488-490, 491, 500-501, 503, R29, R72-R74		
b.	Identify attributes for classifying triangles (e.g., two equal sides for the isosceles triangle, three equal sides for the equilateral triangle, right angle for the right triangle).	SE/TE: R72		
c.	Identify attributes for classifying quadrilaterals (e.g., parallel sides for the parallelogram, right angles for the rectangle, equal sides and right angles for the square).	SE/TE: 472-475, 483, 501, R29		
d.	Identify right angles in geometric figures, or in appropriate objects, and determine whether other angles are greater or less than a right angle.	SE/TE: R71		
Objective 3.2: Demonstrate the meaning of congruence through applying transformations.				
a.	Demonstrate the effect of reflection, translation, or rotation using objects.	SE/TE: R74		
b.	Determine whether two polygons are congruent by reflecting, translating, or rotating one polygon to physically fit on top of the other.	SE/TE: 484-485, 500, 503, R73-R74		
STANDARD IV: Students will select and use appropriate units and measurement tools to solve problems.				
Percentage of coverage in the *student and teacher edition* for Standard IV: 100 %		**Percentage of coverage not in student or teacher edition, but covered in the *ancillary material* for Standard IV: _____%**		
OBJECTIVES & INDICATORS		**Coverage in *Student Edition(SE) and Teacher Edition (TE)* (pg #'s, etc.)**	**Coverage in *Ancillary Material* (titles, pg #'s, etc.)**	***Not covered in TE, SE or ancillaries*** ✓
Objective 4.1: Select and use appropriate tools and units to estimate and measure length, weight, capacity, time, and perimeter of two-dimensional figures.				

a.	Describe the part-whole relationships (e.g., 3 feet in a yard, a foot is 1/3 of a yard) between metric units of length (i.e., centimeter, meter), and among customary units of length (i.e., inch, foot, yard), capacity (i.e., cup, quart), and weight (i.e., pound, ounce).	SE/TE: 213, 231, 233, 355, 356, 372, 375, 378-381, 384-385, 386-389, 405, 423-428, 432-434, 444-447, 456, R86, R90, R93, R95, R99, table inside last page		
b.	Measure the length of objects to the nearest centimeter, meter, half- and quarter-inch, foot, and yard.	SE/TE: 8, 233, 373-374, 375-377, 378-381, 384-385, 386-389, 390, 391, 412, 413, 414, 417, 419, R24, R25,		
c.	Measure capacity using cups and quarts, and measure weight using pounds and ounces.	SE/TE: 420, 422, 423-424; 425-429, 430-431, 435, 438-441, 442-443, 456-457, 459		
d.	Identify the number of minutes in an hour, the number of hours in a day, the number of days in a year, and the number of weeks in a year.	SE/TE: 416, 623, inside last page		
e.	Describe perimeter as a measurable attribute of two-dimensional figures, and estimate and measure perimeter with metric and customary units.	SE/TE: 355, 392-395, 400, 401, 412, 415, 417, R25		
Objective 4.2: Solve problems involving measurements.				
a.	Determine simple equivalences of measurements (e.g., 30 inches = 2 feet and 6 inches; 6 cups = 1½ quarts; 90 min. = 1 hr. 30 min.).	SE/TE: 213, 231, 233, 355, 356, 381, 385, 405, 456, 623, inside last page		
b.	Compare given objects according to measurable attributes (i.e., length, weight, capacity).	SE/TE: 355, 372, 373-374, 378-379, 381, 385, 386, 423-424, 425-428, 429, 432-435, 438-441, 442-443, 444-447, 457-459, R24, R26, R67		
c.	Solve problems involving perimeter.	SE/TE: 33, 355, 392-395, 401, 415, 437, R25, R34, R58		
d.	Determine elapsed time in hours (e.g., 7:00 a.m. to 2:00 p.m.).	See related content— SE/TE: 347, 416, 437, 454-455, R31, 458, 460, 462-463, 615, 626, 642, R67		
STANDARD V: Students will collect and organize data to make predictions and identify basic concepts of probability.				

Percentage of coverage in the *student and teacher edition* for Standard V: 100 %		**Percentage of coverage not in student or teacher edition, but covered in the *ancillary material* for Standard V: _____%**		
OBJECTIVES & INDICATORS		**Coverage in *Student Edition(SE) and Teacher Edition (TE)* (pg #'s, etc.)**	**Coverage in *Ancillary Material* (titles, pg #'s, etc.)**	***Not covered in TE, SE or ancillaries*** ✓
Objective 5.1: Collect, organize, and display data to make predictions.				
a.	Collect, read, represent, and interpret data using tables, graphs, and charts, including keys (e.g., pictographs, bar graphs, frequency tables, line plots).	SE/TE: 4-5, 7, 11, 12-13, 18-19, 21, 30, 36, 41, 42, 46, 48, 50, 52, 58, 62-63, 70, 73, 74, 76, 80, 84, 89, 98, 104, 113, 116, 122, 125, 128, 130, 133, 135, 140, 143, 147, 148, 158, 173, 180, 185, 188, 193, 205, 304-305, 314, 321, 324, 340, 346, 348-351, 362, 365-366, 393, 432, 438, 440, 445, 488, 510-521, 524-530, 529-530, 534-536, 537-539, 541, 547-551, 553-555, 564, 566, 605, R76		
b.	Make predictions based on a data display.	SE/TE: 266, 324, 347, 348, 351, 353, 407, 520, 542-545, 548-549, 552		
Objective 5.2: Objective 2: Identify basic concepts of probability.				
a.	Describe the results of events using the terms "certain," "likely," "unlikely," and "impossible."	SE/TE: 542-545, 548, 552, 553, 554, R34		
b.	Conduct simple probability experiments, record possible outcomes systematically, and display results in an organized way (e.g., chart, graph).	SE/TE: 542-545, 552, 555		
c.	Use results of simple probability experiments to describe the likelihood of a specific outcome in the future.	SE/TE: 542-545, 548, 552, R34		